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HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
530 VIRGINIA ROAD
P.O. BOX 9133
CONCORD, MA 01742-9133

EXAMINER

CORSARO, NICK

ART UNIT PAPER NUMBER

2684

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/630,024

Applicant(s)

FARLEY ET AL.

Examiner

Nick Corsaro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

RESPONSE TO AMENDMENT

Response to Arguments

1. Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

The Applicant's amendments to the claims, where **a dedicated multicast channel** is used to send multicast messages to a group of plurality of group members, reads upon Shaughnessy in view of Newly discovered reference Naito et al. (6,728,226) as follows. Shaughnessy showed multicast messaging as shown in the last office action. Naito has now been added to show it is obvious to one skilled in the art to have a dedicated multicast channel.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 10-14, 18-20, and 28-31, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy et al. (6,141,347) in view of Naito et al. (6,728,226).

Consider claim 1, Shaughnessy discloses a method of multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy

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discloses determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically disclose, channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members. Naito teaches channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members (see col. 2 lines 59-67, col. 3 lines 1-20, col. 6 lines 35-39, col. 6 lines 63-64, and col. 10 lines 12-35, where Naito is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members, as taught by Naito, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Naito (col. 2 lines 22-50).

Consider claim 13, Shaughnessy discloses a system for multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses a base station processor having a plurality of wireless channels operable to transmit a wireless message; and a plurality of

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subscriber access units in communication with said base station processor over a wireless connection and adapted to receive messages via said plurality of wireless channels (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses said base station processor is operable to receive a multicast message and simultaneously transmit said multicast message to at least one of said plurality of subscribers access units via the plurality of wireless channels (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13, see col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically disclose one of said plurality of wireless channels dedicated to transmitting multicast messages. Naito teaches one of said plurality of wireless channels dedicated to transmitting multicast messages (see col. 2 lines 59-67, col. 3 lines 1-20, col. 6 lines 35-39, col. 6 lines 63-64, and col. 10 lines 12-35, where Naito is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have one of said plurality of wireless channels dedicated to transmitting multicast messages, as taught by Naito, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Naito (col. 2 lines 22-50).

Consider claim 29, Shaughnessy discloses a computer program product having computer program code for multicasting messages in a wireless network (see col. 1 lines 9-12, col. 4 lines

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62-67, and col. 5 lines 1-21, where Shaughnessy discloses a microprocessor, i.e. program product and code, that performs the method). Shaughnessy discloses a computer program code for receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses computer program code for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses computer program code for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses one of said wireless channels dedicated to transmitting multicast messages. Naito teaches the one of said wireless channels dedicated to transmitting multicast messages (see col. 2 lines 59-67, col. 3 lines 1-20, col. 6 lines 35-39, col. 6 lines 63-64, and col. 10 lines 12-35, where Naito is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have one of said wireless channels dedicated to transmitting multicast messages, as taught by Naito, thus modifying the system to

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operate according to third generation standards for mobile communication systems, as discussed by Naito (col. 2 lines 22-50).

Consider claim 30, Shaughnessy discloses a computer data signal including computer program code for multicasting messages in a wireless network (see col. 1 lines 9-12, col. 4 lines 62-67, and col. 5 lines 1-21, where Shaughnessy discloses a microprocessor, i.e. program product and code, that performs the method). Shaughnessy discloses program code for receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses program code for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses a program code for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically disclose channels dedicated to transmitting multicast messages, the same one of said wireless channels used to send said multicast message to said plurality of multicast group members. Naito teaches channels dedicated to transmitting multicast messages, the same one of said wireless channels used to send said multicast message to said

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plurality of multicast group members (see col. 2 lines 59-67, col. 3 lines 1-20, col. 6 lines 35-39, col. 6 lines 63-64, and col. 10 lines 12-35, where Naito is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have channels dedicated to transmitting multicast messages, the same one of said wireless channels used to send said multicast message to said plurality of multicast group members, as taught by Naito, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Naito (col. 2 lines 22-50).

Consider claim 31, Shaughnessy discloses a system for multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses a means for receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses a means for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses a means for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically disclose channels dedicated to transmitting multicast messages the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members. Naito teaches channels dedicated to transmitting multicast messages the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members (see col. 2 lines 59-67, col. 3 lines 1-20, col. 6 lines 35-39, col. 6 lines 63-64, and col. 10 lines 12-35, where Naito is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have channels dedicated to transmitting multicast messages the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members, as taught by Naito, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Naito (col. 2 lines 22-50).

Consider claim 2, 3, and 14, Shaughnessy discloses receiving said message at each of the plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25). Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically disclose the same one of said wireless channels. Naito teaches the same one of said wireless channels (see col. 2 lines 59-67, col. 3 lines 1-20, col. 6 lines 35-39, col. 6 lines 63-64, and col. 10 lines 12-35, where Naito is discussing using one channel just for multicast messages). It would have been obvious to one of ordinary skill in the art at the time the

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invention was made to modify the invention of Shaughnessy, and have the same one of said wireless channels used to send said multicast message to said plurality of multicast group members, as taught by Naito, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Naito (col. 2 lines 22-50).

Consider claims 10-12, and 18-20, Shaughnessy discloses scanning the message and parsing a group address in accordance with the group according to a protocol (see col. 1 lines 14-54, col. 3 lines 34-67, and col. 4 lines 1-18).

Consider claim 28, Shaughnessy discloses an Internet connection (see col. 3 lines 34-67).

3. Claims 5-9, 15-17, 21-24, and 26-27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy in view of Naito as applied to claims 1, 13, and 29-31, above, and further in view of Pan et al. (6,308,079).

Consider claims 5 and 21-23, Shaughnessy discloses the method and system, as modified by Naito above. Shaughnessy discloses several talk-groups forming variable sets groups, where the subsets are other groups of the first or other groups (see col. 4 lines 17-42). Shaughnessy and Naito do not specifically disclose another method of talk-groups with subsets of other groups including subsets such that some are listening groups. Pan teaches another method of talk-groups with subsets of other groups including subsets such that some are listening groups (see col. 2 lines 49-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy and Naito, and have another method of talk-groups with subsets of other groups including subsets such that some are listening groups as taught by Pan, thus allowing multiple user to simultaneously broadcast, as discussed by Pan (col. 2 lines 19-25).

Consider claims 6-9, 15-17, 26, and 27, the above combination discloses lookup and routing tables.

Consider claims 24, Shaughnessy discloses the method and system, as modified by Naito above. Shaughnessy discloses several talk-groups forming variable sets groups, where the subsets are other groups of the first or other groups (see col. 4 lines 17-42). Shaughnessy and Naito do not specifically disclose another method of talk-groups with subsets of other groups including subsets such that some are listening groups. Pan teaches another method of talk-groups with subsets of other groups including subsets such that some are listening groups (see col. 2 lines 49-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy and Naito, and have another method of talk-groups with subsets of other groups including subsets such that some are listening groups as taught by Pan, thus allowing multiple user to simultaneously broadcast, as discussed by Pan (col. 2 lines 19-25).

4. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy in view of Naito, as applied to claims 1 above, and further in view of Raith et al. (6,385,461).

Consider claim 4 Shaughnessy, discloses the method and apparatus, as modified by Naito above. Shaughnessy further discloses a page message sent to all the group members (see col. 8 lines 20-25). Shaughnessy and Naito do not specifically disclose one page use for all members. Raith discloses a one page used for all group members (see col. 4 lines 25-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy and Naito, and use one page, as taught by Raith, thus allowing a

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method where terminals do not lose their opportunity to join the call, as discussed by Raith (col. 2 lines 5-11).

5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy in view of Naito and Pan, as applied to claim 24, above, and further in view of Raith et al. (6,385,461).

Consider claim 25, Shaughnessy, discloses the method and apparatus, as modified by Naito and Pan above. Shaughnessy further discloses a page message sent to all the group members (see col. 8 lines 20-25). Shaughnessy, Naito, and Pan, do not specifically disclose one page use for all members. Raith discloses a one page used for all group members (see col. 4 lines 25-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, Naito and Pan, and use one page, as taught by Raith, thus allowing a method where terminals do not lose their opportunity to join the call, as discussed by Raith (col. 2 lines 5-11).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nick Corsaro whose telephone number is 703-306-5616. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nick Corsaro

**NICK CORSARO
PRIMARY EXAMINER**

Primary Examiner
(703) 306-5616